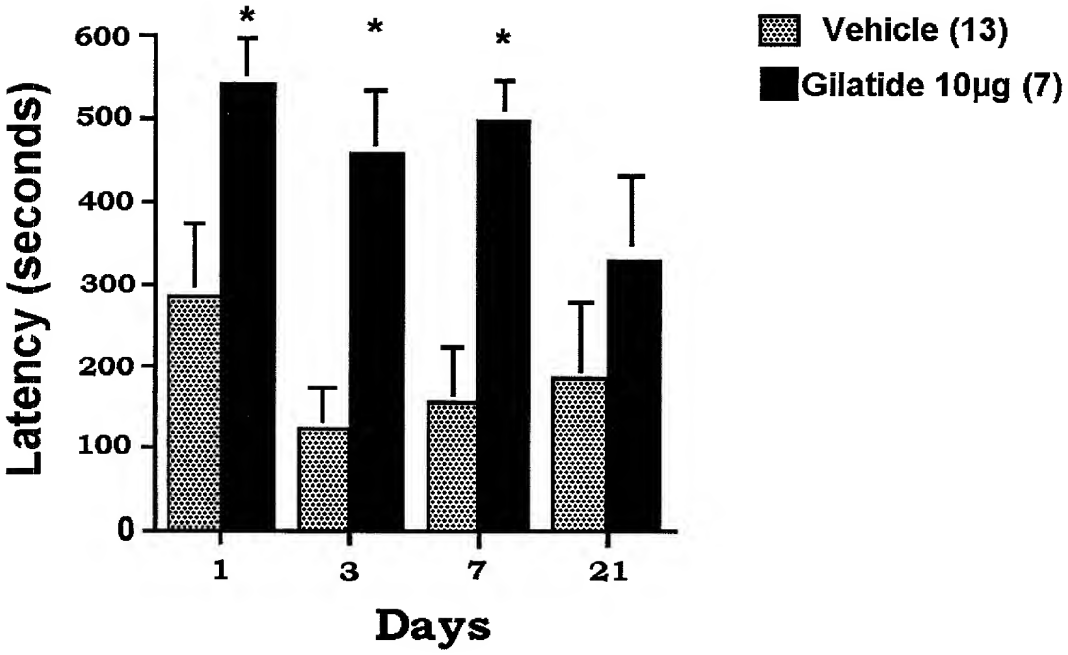

Latency (seconds)
600
500
400
300
200
100
0
*
*
*
1
3
7
21
Days
Vehicle (13)
Gilatide 10µg (7)

Fig. 1

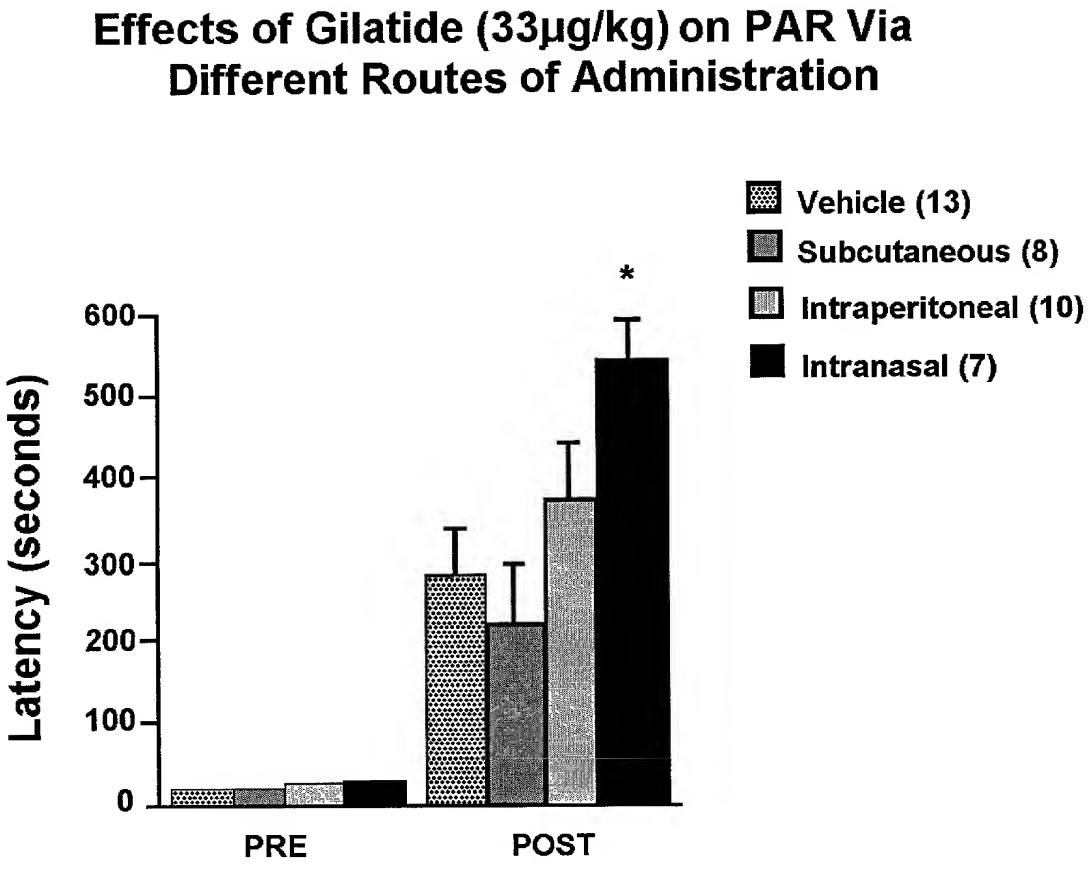

Effects of Gilatide (33µg/kg) on PAR Via Different Routes of Administration
Latency (seconds)
600
500
400
300
200
100
0
PRE
POST
*
Vehicle (13)
Subcutaneous (8)
Intraperitoneal (10)
Intranasal (7)

Fig. 2

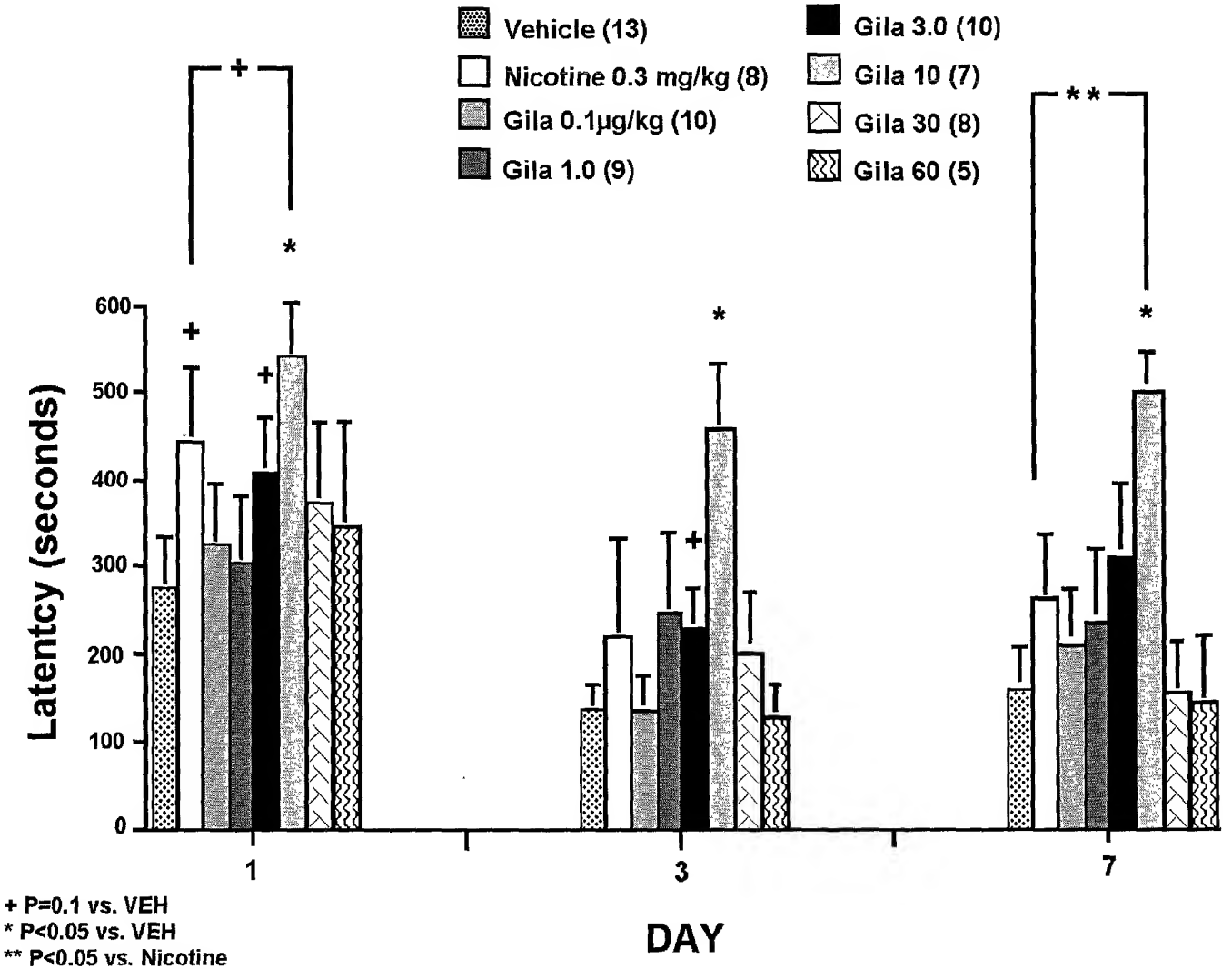

Vehicle (13)
Nicotine 0.3 mg/kg (8)
Gila 0.1µg/kg (10)
Gila 1.0 (9)
Gila 3.0 (10)
Gila 10 (7)
Gila 30 (8)
Gila 60 (5)
Latentcy (seconds)
600
500
400
300
200
100
0
1
3
7
DAY
+ P=0.1 vs. VEH
* P<0.05 vs. VEH
** P<0.05 vs. Nicotine

Fig. 3

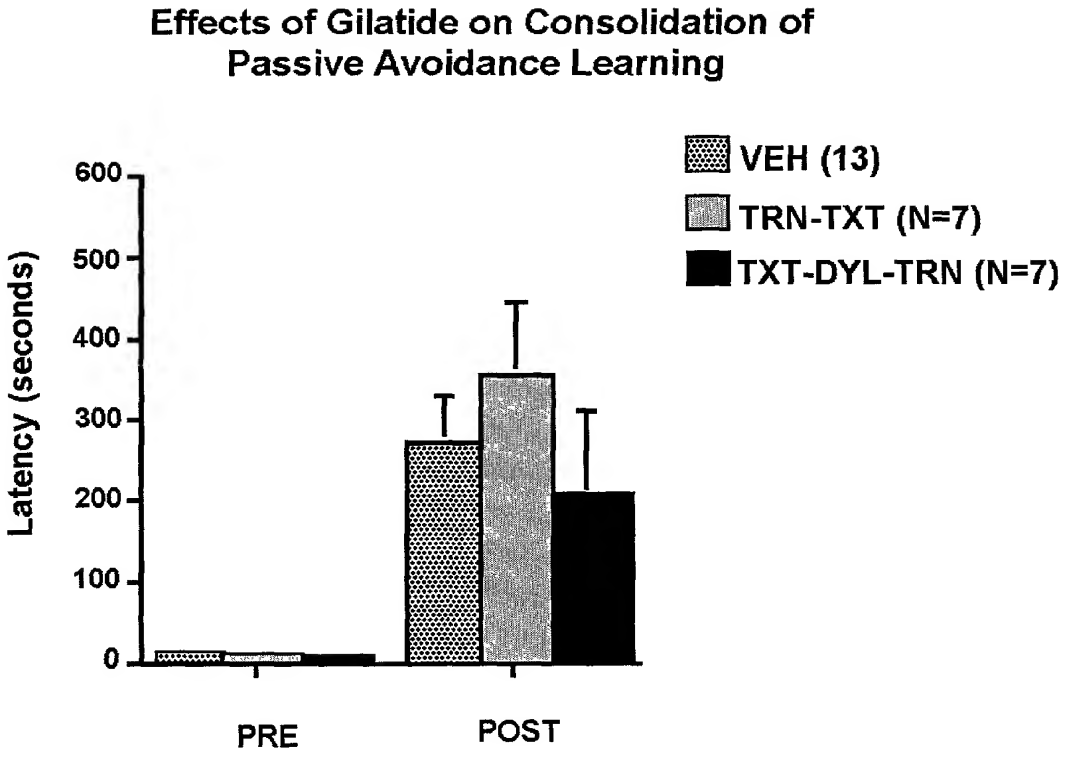
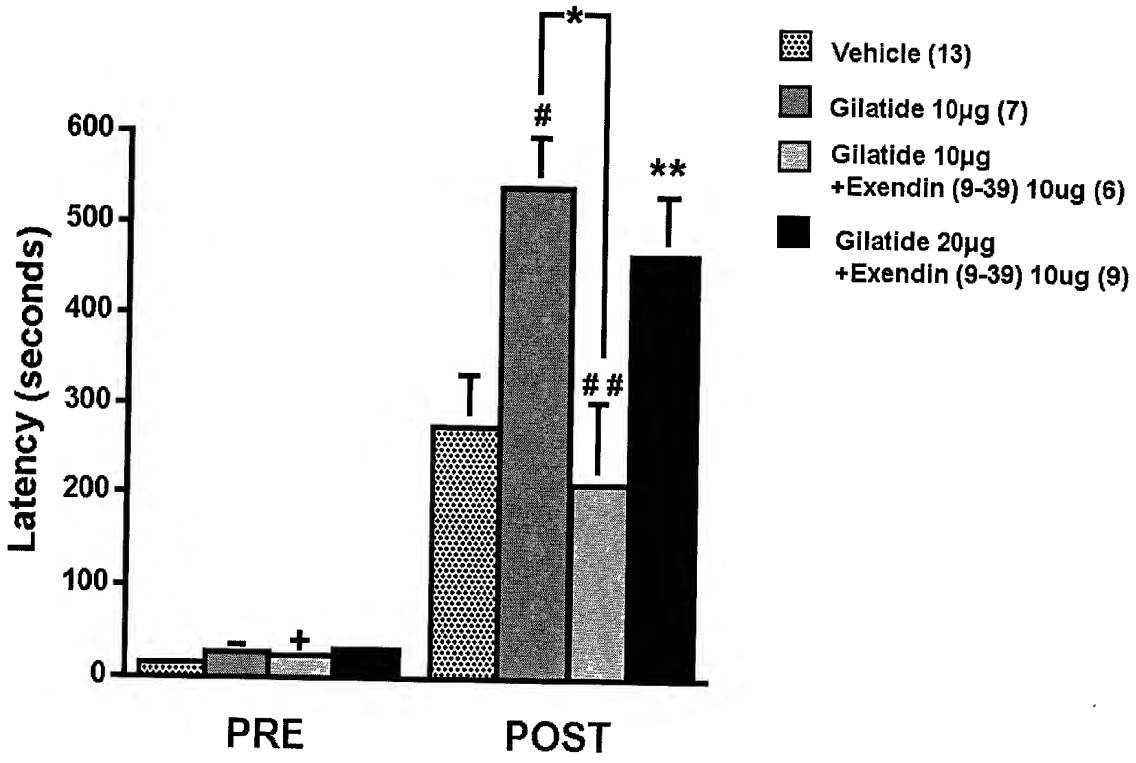

Effects of Gilatide on Consolidation of
Passive Avoidance Learning
VEH (13)
TRN-TXT (N=7)
TXT-DYL-TRN (N=7)
Latency (seconds)
600
500
400
300
200
100
0
PRE
POST

Fig. 4



#VEH vs. Gilatide 10µg,
t=2.939 (18);P=0.009
VEH vs. Gila10µg+Exen(9-39)10,
t=0.59(17);P=0.56
*Gilatide10µg+Exend(9-39)10,
t=2.315(13);P=0.038
**VEH vs. Gilatide 20µg+Exen(9-39)10,
t=2.16(20);P=0.043

Fig. 5

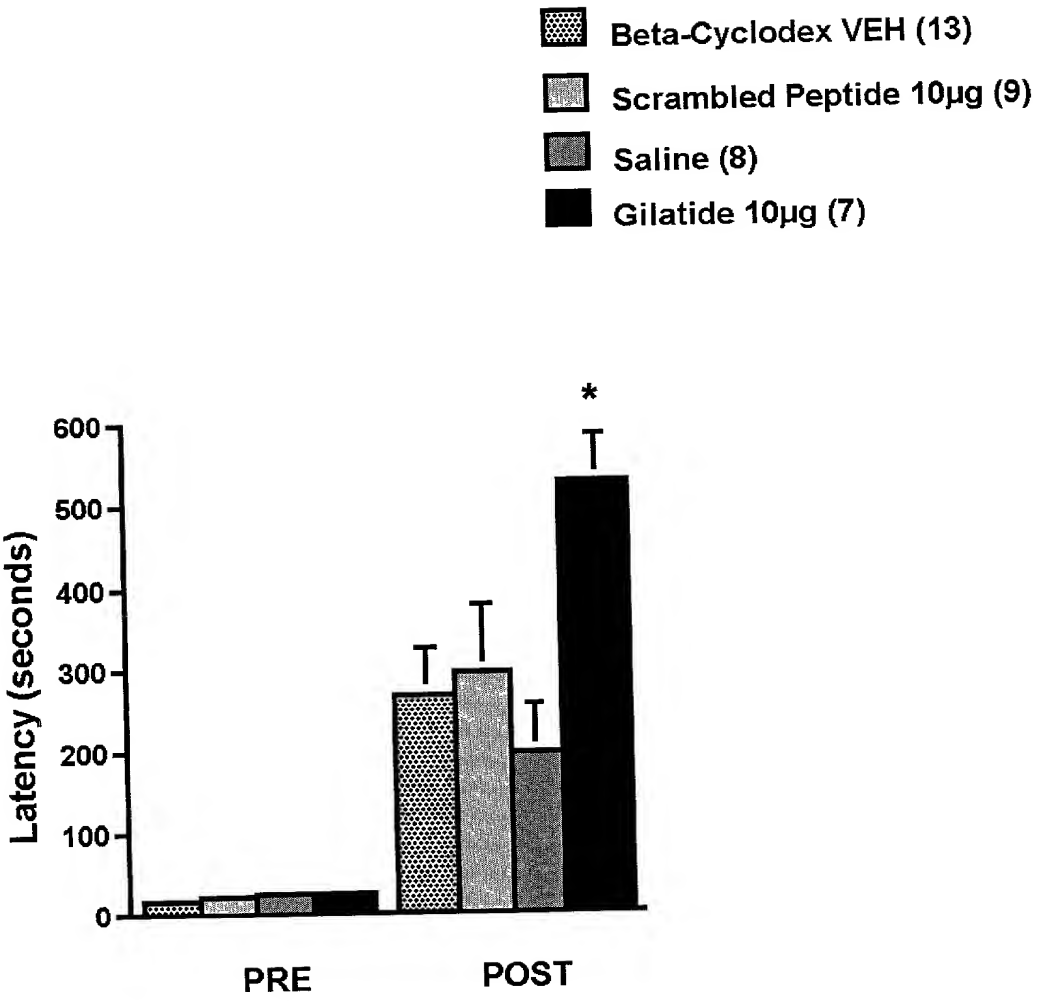

Beta-Cyclodex VEH (13)
Scrambled Peptide 10µg (9)
Saline (8)
Gilatide 10µg (7)
Latency (seconds)
600
500
400
300
200
100
0
*
PRE
POST

Fig. 6

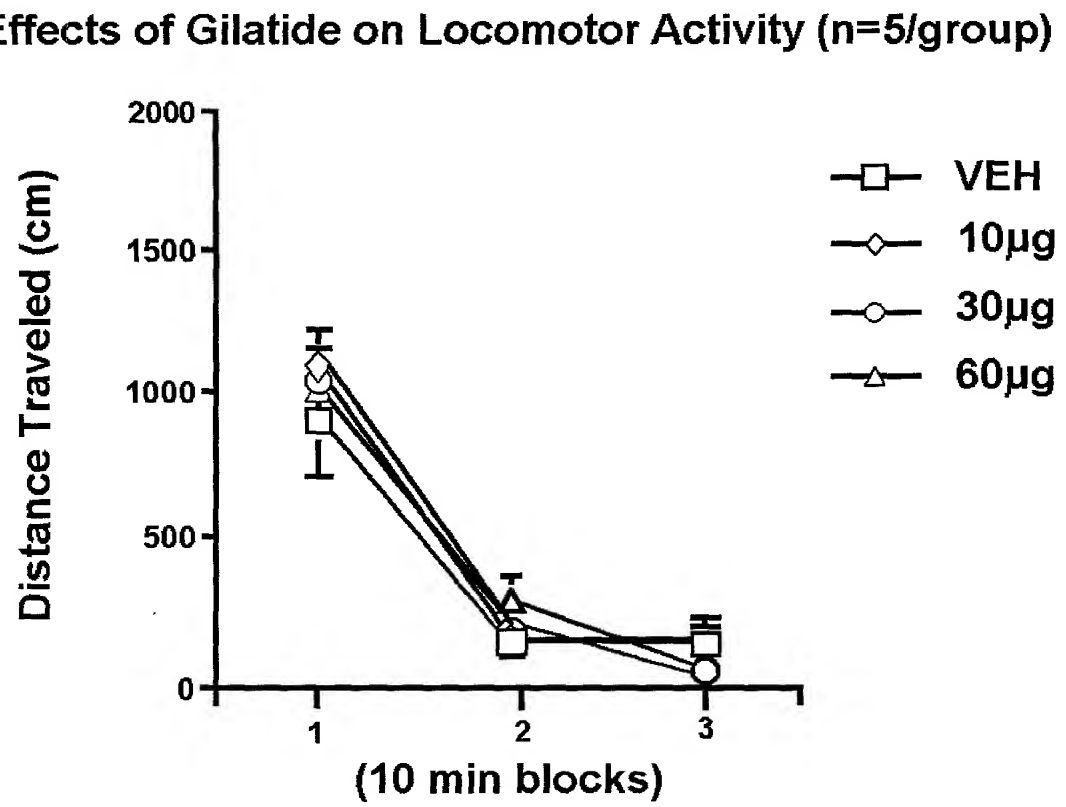

Effects of Gilatide on Locomotor Activity (n=5/group)
Distance Traveled (cm)
2000
1500
1000
500
0
1
2
3
(10 min blocks)
VEH
10µg
30µg
60µg

Fig. 7

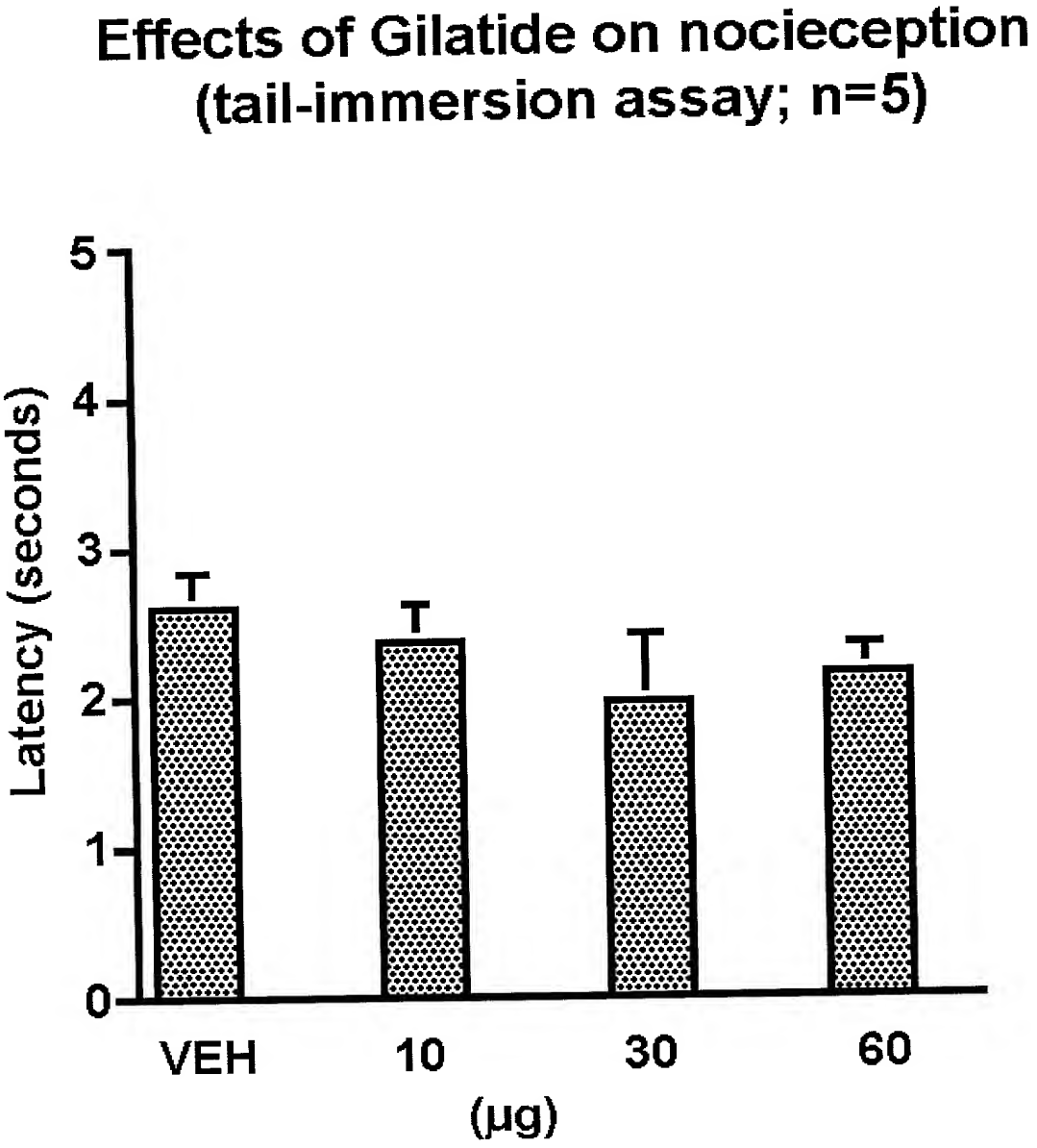

Effects of Gilatide on nocieception
(tail-immersion assay; n=5)
Latency (seconds)
5
4
3
2
1
0
VEH
10
30
60
(µg)

Fig. 8

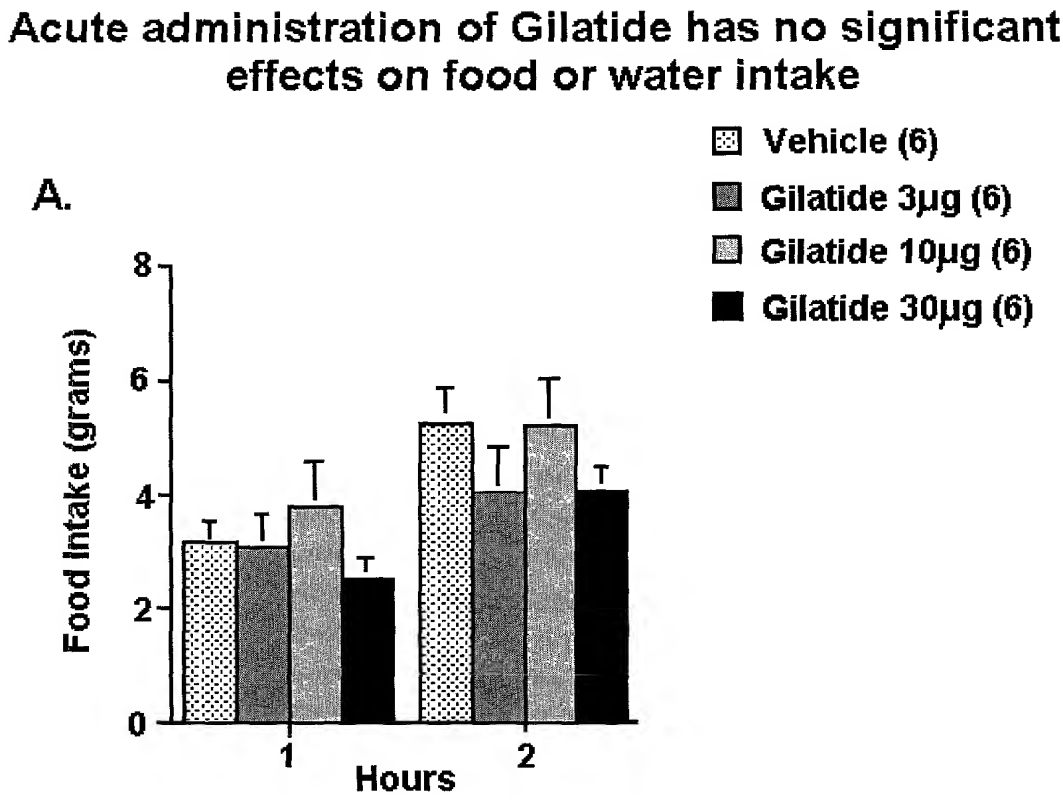

Acute administration of Gilatide has no significant effects on food or water intake
A.
Vehicle (6)
Gilatide 3µg (6)
Gilatide 10µg (6)
Gilatide 30µg (6)
Food Intake (grams)
0
2
4
6
8
1
2
Hours

Fig. 9a

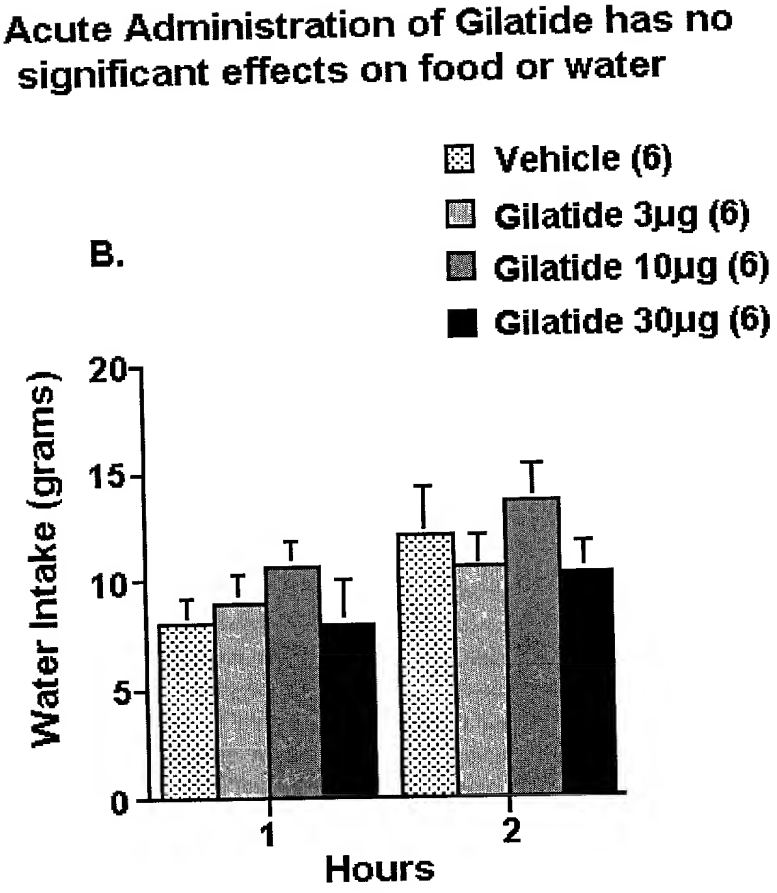

Acute Administration of Gilatide has no significant effects on food or water
B.
Vehicle (6)
Gilatide 3µg (6)
Gilatide 10µg (6)
Gilatide 30µg (6)
Water Intake (grams)
20
15
10
5
0
1
2
Hours

Fig. 9b

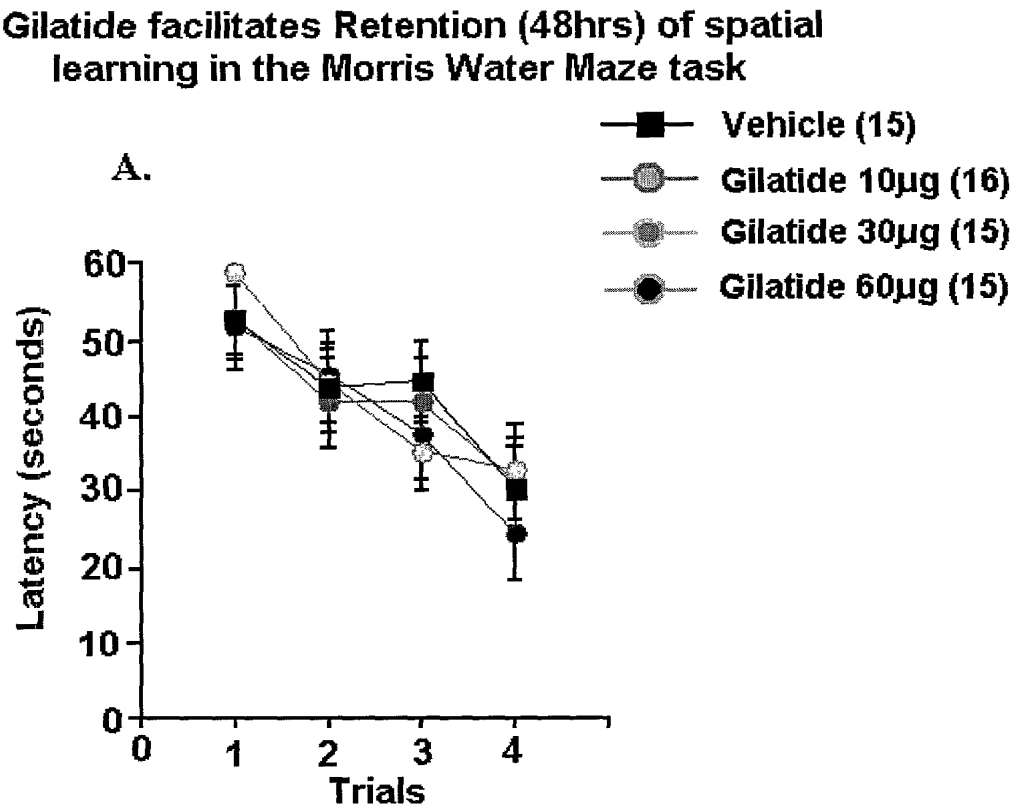

Gilatide facilitates Retention (48hrs) of spatial learning in the Morris Water Maze task
A.
Vehicle (15)
Gilatide 10µg (16)
Gilatide 30µg (15)
Gilatide 60µg (15)
Latency (seconds)
60
50
40
30
20
10
0
0
1
2
3
4
Trials

Fig. 10a

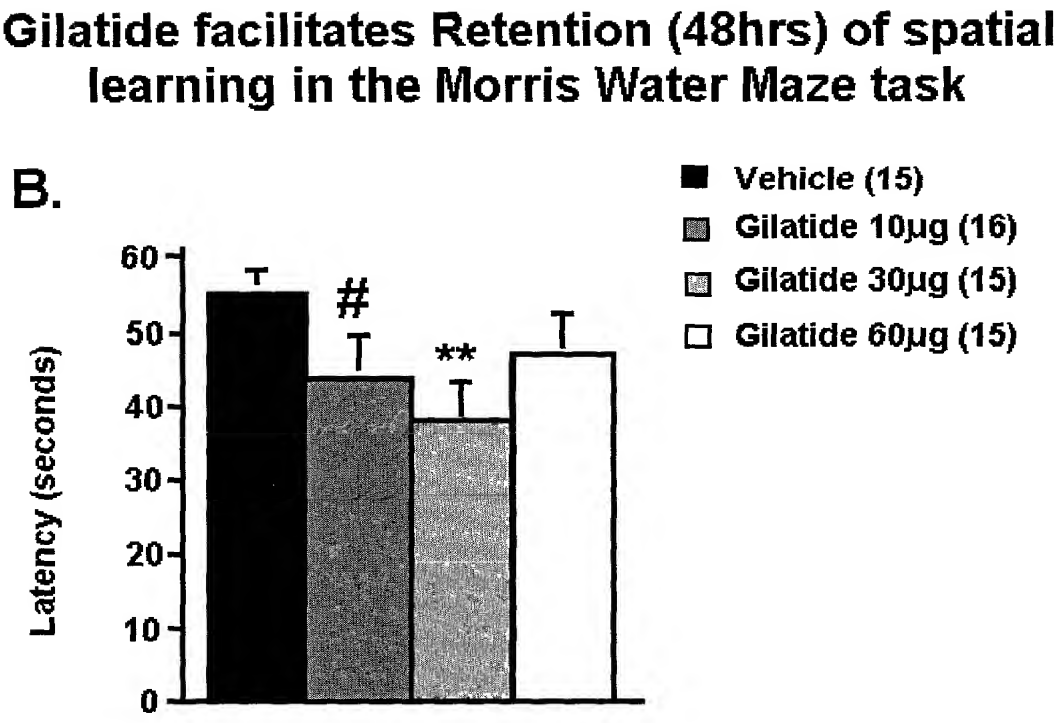

Gilatide facilitates Retention (48hrs) of spatial learning in the Morris Water Maze task
B.
Latency (seconds)
60
50
40
30
20
10
0
#
**
Vehicle (15)
Gilatide 10µg (16)
Gilatide 30µg (15)
Gilatide 60µg (15)

Fig. 10b

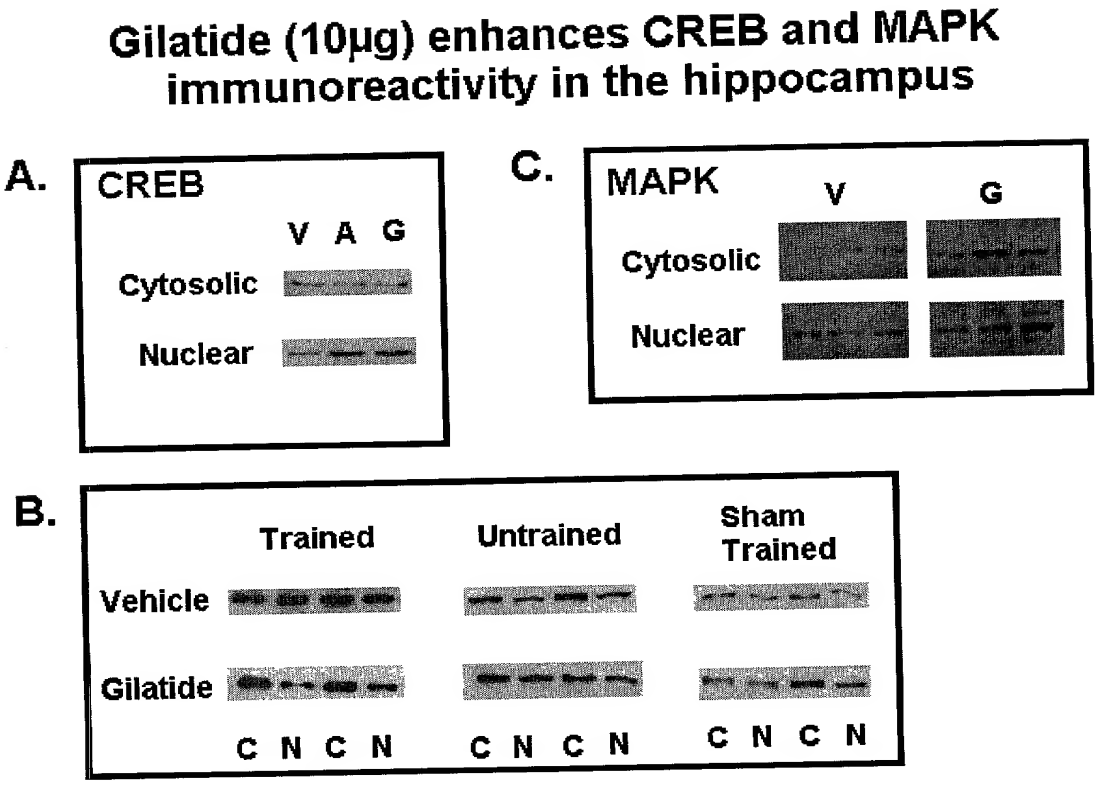

Gilatide (10µg) enhances CREB and MAPK immunoreactivity in the hippocampus
A.
CREB
V A G
Cytosolic
Nuclear
C.
MAPK
V
G
Cytosolic
Nuclear
B.
Trained
Untrained
Sham Trained
Vehicle
Gilatide
C N C N
C N C N
C N C N

Fig. 11